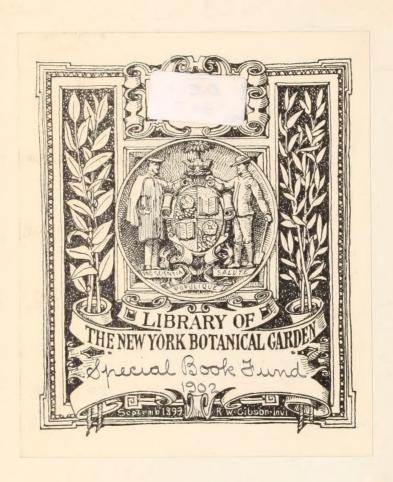
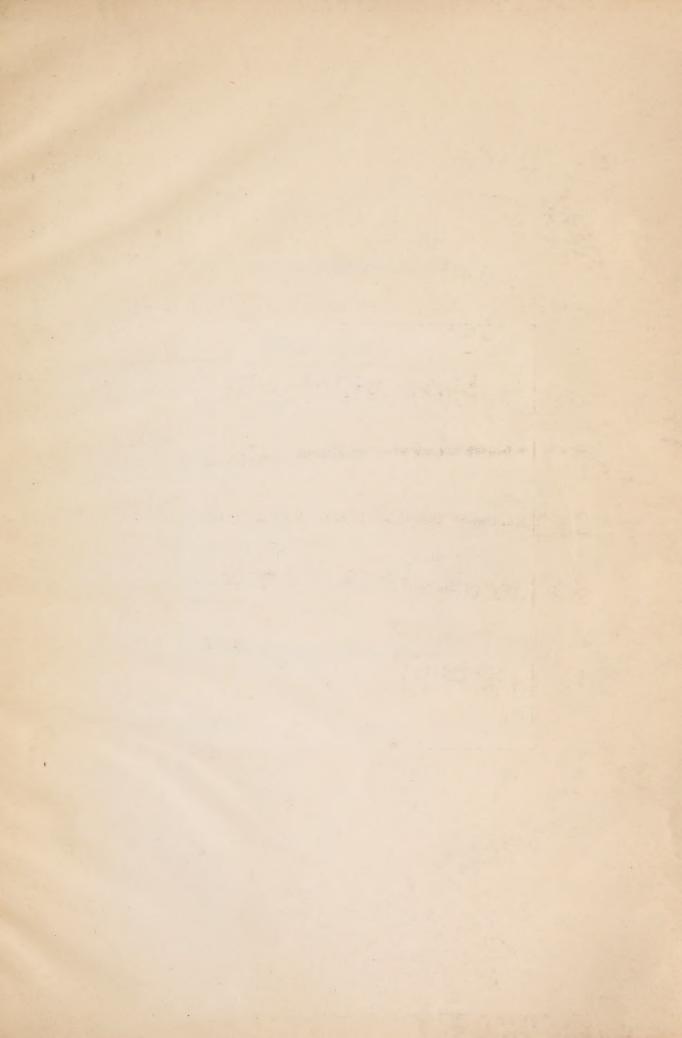
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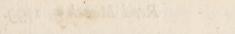






Mit Hancock -

Given me, murch 1800 - by M' Dawson Tumer



PUBLISHED IN

Two Papers

THE FIFTH VOLUME

THE LINNEAN TRANSACTIONS,

DAWSON TURNER, F. L. S.

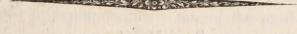
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Mit Hancock -

Given me, march 1800 - by Mr Dawson Tumer



# Two Papers

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1800

Calendarium

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(126)

XI. Calendarium Plantarum marinarum. By Dawfon Turner, Efq. F. L. S.

## Read March 5, 1799.

IN fubmitting to the Linnean Society a lift of the periods at which fome of the British marine. fome of the British marine Alga produce their fructification, it may not perhaps be wholly unnecessary to preface it by observing, that the habitation of many of these plants at the bottom of the ocean, remote from any shore, where we are of necessity precluded from all possibility of tracing them through their several stages of growth, is certainly one of the greatest obstacles to our procuring a clear and comprehensive knowledge of them. How far the difficulties arifing from this circumstance can ever be entirely removed, time and experience must alone determine; but we have reason to entertain very fanguine hopes, as the beauty of this tribe has of late years attracted many admirers, to whose zeal and abilities marine botany is much indebted; and this Society may boast of having given to the world by far the most valuable account ever written of these plants. But much still remains to be done; and it can be done only by naturalists resident upon the different parts of the coast accustoming themselves to examine attentively the various species in their feveral gradations, and laying before the world the refult of their inquiries. To stimulate them to this, was one of my principal objects in bringing forward the prefent remarks; for, as no British author has given us any thing like a complete lift of the times of fructification of the fubmerfed Alga, those naturalists who are in the

the habit of occasionally visiting the sea, and collecting its productions, are led to expect that whatever they find they will find in perfection; which has not unfrequently been the cause of error as well to themselves as to others. For, to mention one instance among many, the Fucus fubfufcus, which is one of the most common species upon the Norfolk shore, and fructifies only in the earliest months of fpring, is generally gathered in September, and often throughout the whole winter, with its stem and branches swollen in various parts; which fwellings many very learned botanists have mistaken for fruit, and conceived themselves discoverers of either, what they called, diamorphous fructification, or a new species; although, from having again and again, in company with my worthy friend Mr. Wigg, A. L. S. examined these tumours, I can fafely pronounce them nothing more than the fubstance of the frond fwollen, and caused, as I imagine, by fome marine infect, the fame being, though not fo frequently, observable upon other Fuci. It were easy to enlarge upon this fubject, and produce many fimilar inflances of error; but as this one is fufficient to establish my point, I shall refrain from faying more at prefent, as I may probably, at some future time, lay before this Society a few remarks more particularly relating to the mode of fructification that obtains in these vegetables.

Having, on the foregoing accounts, been long conscious of the greater facility which would attend our investigation of the marine  $Alg\alpha$ , could we fix with tolerable precision the times when we might expect to gather them at maturity, I have constantly habituated myself to commit to writing at what months I have found the different species in fruit; and though my list must necessarily be imperfect, as well because I am obliged to trust to the winds and waves, the nature of our shore not allowing us to visit them in their places of growth, as because we find upon our coast only a limited num-

ber.

ber, I nevertheless flatter myself with the hope that it may have its use, by inducing the botanists of distant countries to bestow some attention upon this neglected branch of a favourite subject. For its accuracy, as far as it extends, I can with safety vouch, as I have admitted nothing that has not been the result of my own actual observation, either upon Fuci sound along the Norsolk shore, or upon a few which I have at various times received through the medium of sailors from the southern counties.

It now only remains for me to add, that a principal cause of the impersection of the following Catalogue lies in our being wholly unacquainted with the fructification of many species, as Fucus saccharinus, filum, \*viridis, &c. together with almost all the membranaceous Ulvæ, and a great proportion of the Confervæ; which genus I shall hardly mention, as our knowledge of the species is at present so impersect, that it requires more than ordinary fortune to find two botanists who agree in assigning to the same plant the same name.

YARMOUTH, February 10, 1799.

\* This Fucus, figured in the Flora Danica, tab. 886, was, I believe, first discovered to be a native of Great Britain by Sir Thomas Frankland, Bart. F. L. S. and is occasionally gathered upon the Yarmouth beach. It deserves to be remarked, that when fresh it is of a beautiful orange colour, which it loses after having been a short time exposed to the air, and becomes of a pale verdegris green; but if kept in fresh water, it changes this also to a dark brown.

as I may probably at lone lutter

## JANUARY.

Fucus fanguineus.

finuofus.

loreus.

ciliatus.

membranifolius.

radiatus.

lumbricalis.

plicatus.

filiquofus.

crifpus.

bifidus.

nodofus.

ferratus.

patens.

## FEBRUARY.

Fucus nodofus.

filiquofus.

ferratus.

fubfuscus.

plicatus.

finuofus.

crispus.

laciniatus.

### MARCH.

Fucus nodosus.

ferratus

plicatus.

Fucus subfuscus.

filiquofus.

finuosus.

crispus.

laciniatus.

#### APRIL.

Fucus nodofus.

ferratus.

plicatus.

diffusus.

amurus.

fubfuscus.

finuosus.

crispus.

laciniatus.

Conferva coccinea. With.

polymorpha.

#### MAY.

Fucus fubfuscus.

finuofus.

laciniatus.

crifpus.

diffusus.

Conferva coccinea.

polymorpha.

## JUNE.

Fucus coccineus.

hypogloffum.

Fucus

Fucus kaliformis.
dafyphyllus.
afparagoides.
byffoides.
diffufus.

Conferva rubra. diaphana.

Ulva atomaria.
purpurafcens.
ligulata.

## JULY.

Fucus kaliformis.
hypogloffum.
byffoides.
coccineus.
afparagoides.
pedunculatus.
dafyphyllus.
pinnatifidus.

Conferva rubra. diaphana. ciliata.

Ulva ligulata.
atomaria.
dichotoma.
rubens.
purpurafcens.
fiftulofa.

### AUGUST.

Fucus kaliformis.

pedunculatus.

purpurafcens.

byffoides.

afparagoides.

coccineus.

dafyphyllus.

bifidus.

hypogloffum.

Conferva rubra. diaphana. ciliata.

Ulva ligulata. atomaria. dichotoma. fiftulofa. rubens.

## SEPTEMBER.

Fucus crifpus.
dafyphyllus.
afparagoides.
confervoides.
bifidus.
coccineus.
purpurafcens.
laceratus.
Conferva rubra.

Ulva

Ulva rubens.
dichotoma.
atomaria.
fiftulofa.

#### OCTOBER.

Fucus bifidus. radiatus. fastigiatus. coccineus. purpurascens. crifpus. rubens. laceratus. membranifolius. fanguineus. ciliatus. plicatus. nodofus. confervoides. Conferva rubra. Ulva dichotoma.

#### NOVEMBER.

Fucus filiquofus.
crifpus.
bifidus.
purpurafcens.

atomaria.

Fucus lumbricalis.
radiatus.
plicatus.
nodofus.
ciliatus.
pinaftroides.
confervoides.
membranifolius.
Ulva dichotoma.
atomaria.

#### DECEMBER.

Fucus loreus.
nodofus.
lumbricalis.
crifpus.
filiquofus.
fibrofus.
radiatus.
fanguineus.
purpurafcens.
membranifolius.
ferratus.
finuofus.
ciliatus.

Fucus verficulofus and Ulva diaphana are found in fruit during the whole year.

XXIV. Catalogue.

. . . . . .

XXIV. Catalogue of some of the most rare Plants observed in a Tour through the Western Counties of England, made in June 1799, by Dawson Turner, Esq. F. L. S. and Mr. James Sowerby, F. L. S.

## Read October 1, 1799.

THE expedition which it is in general necessary to employ in passing through a large extent of country, the want of proper books and other conveniences to examine what is found, and, above all, the ignorance of the spots most likely to prove advantageous to his researches, are obstacles which every traveller, whose pursuit is Natural History, must encounter, in a greater or smaller proportion. Of these a very considerable share fell to our lot, the objects that we endeavoured to follow being far more numerous and extensive than our limited leisure would allow us to attain; for it cannot be imagined that the time left for Botany could be considerable, when it is known that in little more than a month we journeyed nearly a thousand miles, striving at the same time to bestow attention upon the other branches of natural history, the manufactures, and the numerous antiquities with which the county of Cornwall eminently abounds.

This, then, must plead our excuse (if indeed an excuse be necessary) for the shortness of the following list, into which we have admitted no plant that we ourselves did not see growing, and from which we have tried to exclude all those that may not be

claffed

classed among the more rare productions of this kingdom: unless, perhaps, in the genera of Lichen and Fucus, which we considered as tribes so little known in general, that we thought we might be excused if we noticed all excepting the most common. The peculiar season of the year of course prevented our meeting with either Musci, Jungermanniae, or Fungi.

We have mentioned many habitats that were before quoted by authors, but have been induced to do fo from a defire to flow that the plants still exist in the same places; and we now submit the fruits of our researches to the Linnean Society, slattering ourselves with the hope that they may hereafter prove useful to some Botanist, whom chance or inclination may lead to the spots which we visited.

Having premifed this, it only remains for us to express the sense we feel of the kind attention we received from the cultivators of Natural History in the places through which we passed, particularly to Stephen Bryer, Esq. of Weymouth, to the Rev. J. T. Thomfon, and William Penneck, Esq. of Penzance, to Thomas Webb Dyer, and William Claysield, Esqrs. of Bristol, and to Dr. Williams, of Oxford; to all of whom we are happy to own ourselves indebted, as well for repeated instances of civility, as for the trouble they took in pointing out to us the plants growing round their several towns.

Scrapias latifolia-St. Vincent's Rock, near Briflol.

Valeriana rubra—Walls of Glastonbury Abbey, and Oxford. Sometimes with a white flower.

Iris fætidiffima—Hedges about Weymouth.

Eriophorum vaginatum—Marsh near Penzance.

Carex digitata—St. Vincent's Rock.

Rubia peregrina—Hedges near Exeter, Plymouth, Sidmouth, Dunfter, &c. &c.

Anchusa sempervirens—near Liskeard and Barnstaple.

Symphytum patens—Meadows between Lyme-Regis and Sidmouth.

Campanula hederacea—near Falmouth, Penzance, Camelford, &c.

Verbascum Lychnitis-near Taunton.

Viola lactea—Heath's between Lifkeard and Leftwithiel.

Illecebrum verticillatum—Boggy ground near Penzance.

Herniaria glabra—Hedges at the Lizard Point.

Beta maritima—Cliffs at Weymouth, Falmouth, &c.

Daucus maritimus, With.—Rocks about Castle-Treryn.

Crithmum maritimum—common in Cornwall.

Heracleum Sphondylium \( \begin{aligned} \)—Hedges near Holfworthy, Devonshire.

Ligusticum cornubiense-near Bodmin.

Oenanthe crocata—plentiful in Cornwall.

Pimpinella dioica-St. Vincent's Rock.

Tamarix gallica—St. Michael's Mount.

Linum usitatissimum—Cliffs at Falmouth.

Scilla autumnalis-Clifton near Briftol.

----- verna-Pastures near the Lizard-Point and Land's-End.

Afparagus officinalis—near the Ferry and extremity of Portland Island.

Vaccinium Myrtillus-Hedges about Lifkeard.

Erica vagans—abundant on the Downs between Helston and the Lizard.

Chryfosplenium oppositifolium—common in Cornwall.

Dianthus cæsius—Chedder Rocks—plentiful, but mostly in inaccessible places.

Silene amæna, Huds.—Sea-coast at Weymouth, and in Cornwall.

Sedum

Lichen

<sup>\*</sup> We gathered this in great plenty, but faw no appearance of V. hybrida See Engl. Bot. 482.

Lichen coccineus *—Stone-Henge.
crenularius—Rocks near the Lizard.
tartareus-Rocks near Redruth and the Land's End.
byffinus-Wall at Briftol.
Henge.
luridus—Chedder Rocks.
cartilagineus-St. Vincent's and Chedder Rocks.
centrifugus—Rocks near Redruth.
omphalodes-near Penzance, Redruth, &c.
globiferus-Stones near Castle Karn Brè.
exilis—Rocks at St. Cleere's near Lifkeard.
articulatus—Trees near Lifkeard.
vulpinus-Rocks and Trees about Calle Treryn, Lifkeard, &c.
fuciformis—Rocks near King Arthur's Castle at Tintagel.
Endocarpon—Chedder and St. Vincent's Rocks.
did not find it in fruit.
glomuliferus—Trees near Launceston.
caperatus—abundantly in fruit on rocks near Penzance, and in
a Wood near Camelford.

<sup>\*</sup> From a careful examination of this Lichen, which I here found in great abundance, I was perfuaded of its specific difference from the L. hamatomma figured in Engl. Bot.—The hardly resemble each other in any circumstance except the colour of the shields. D. T.

Lichen fcrobiculatus  ———————————————————————————————————
Camelford and Bodmin, and on a stone-sence near Ilfracombe.
Bodmin, &c.
Tremella—Rocks in Devonshire.
Fucus tamarifcifolius—Falmouth and St. Michael's Rock.
——————————————————————————————————————
alatus—Weymouth.
hypogloffum—Mount Edgecumbe.
——————————————————————————————————————
jubatus—King's Cove and Ilfracombe.
pinnatifidus var. ofmunda—Weymouth.
tomentofus
tomentofus King's Cove and Mount's Bay.
aculeatus-Portland Island and Kynance Cove near the Li-
zard.
ovalis-Portland Island, Falmouth, and Mount's Bay.
fubfuscus-Portland Island. We saw only one specimen.
Fucus

Fucus corneus—King's Cove.

—— cartilagineus
—— obtufus

—— obtufus

—— rubens

—— Mount Edgecumbe and Falmouth.

Conferva gelatinofa—near Launceston.

Sphæria licheniformis—Stones on Glastonbury Tor Hill.
—— nitida—in a Wood between Camelford and Bodmin.

Lycoperdon equinum—near Maiden Castle near Dorchester, on a ram's horn.



